

Zagmount

1649

# 11

PAGE: 1

RAW SEQUENCE LISTING  
PATENT APPLICATION US/08/989,881A

DATE: 08/06/1999  
TIME: 15:22:49

Input Set: H989881A.RAW

This Raw Listing contains the General Information  
Section and up to first 5 pages.

ENTERED

1 <110> APPLICANT: Sheen, Jen  
2 <120> TITLE OF INVENTION: STRESS-PROTECTED TRANSGENIC PLANTS  
3 <130> FILE REFERENCE: 08472/716002  
4 <140> CURRENT APPLICATION NUMBER: US/08/989,881A  
5 <141> CURRENT FILING DATE: 1997-12-12  
6 <150> EARLIER APPLICATION NUMBER: 60/032,966  
7 <151> EARLIER FILING DATE: 1996-12-13  
8 <160> NUMBER OF SEQ ID NOS: 18  
9 <170> SOFTWARE: FastSEQ for Windows Version 3.0  
10 <210> SEQ ID NO 1  
11 <211> LENGTH: 1020  
12 <212> TYPE: DNA  
13 <213> ORGANISM: Arabidopsis thaliana  
14 <220> FEATURE:  
15 <221> NAME/KEY: variation  
16 <222> LOCATION: (1)...(1020)  
17 <223> OTHER INFORMATION: N is any nucleotide.  
18 <400> SEQUENCE: 1

W--> 19 gttgtaaaac gacggncagt gaattgtaat acgactcnct atagggcgna attggagctc 60  
20 caccgcggtg gcgccgctc tagaactagt ggatec atg gct aat caa act cag 114  
21 atc agc gac aag tac atc tta gga cga gaa ctc ggt cgc ggc gaa ttc 162  
22 gga atc acg tat ctt tgt aca gat aga gag act cgt gaa gct tta gct 210  
23 tgc aaa tca atc tcc aag aga aag ctc cga acc gcc gtc gat gtg gaa 258  
24 gac gtc cgt cgt gaa gtc acg atc atg tca act tta ccg gaa cac cca 306  
25 aac gtt gtg aaa ctt aaa gcg act tat gag gat aac gag acc gtg cat 354  
26 ctt gtg atg gag ctt tgt gaa gga ggt gag ctt ttt ggt cgg att gtt 402  
27 gca aga gga cat tat aca gag cgt gcg gcg gct acc gtc gcg aga acg 450  
28 atc gcg gaa gtt gtg agg atg tgt cat gtc aat ggt gtt atg cat aga 498  
29 gat ttg aag cct gag aat ttc ttg ttt gct aac aag aag gag aat tct 546  
30 gca ctt aag gct att gat ttt ggt tta tct gtt ctc ttt aaa cct gga 594  
31 gag agg ttt aca gag att gtt gga agt cct tat tat atg gct cca gaa 642  
32 gtg ttg aag aga aat tat gga cca gag gtt gat gtg tgg agt gct gga 690  
33 gtt atc ctc tac atc ttg ctt tgt ggt gtt cct ccg ttt tgg gca gag 738  
34 act gaa caa ggt gtg gct ctt gcc atc ttg agg gga gtt ctt gat ttt 786  
35 aag aga gat cct tgg tgc cag ata tca gag agc gca aag agc ctt gtg 834  
36 aag cag atg ttg gaa cct gat tca act aag cgt ttg act gct cag caa 882  
37 gtt ctt gat cac cct tgg ata cag aat gca aag aaa aggatcaagc 928  
W--> 38 ttatcgatac cgtcgacctc gagggggggc cgggtaccag ctttngttcc ctttagtgag 988  
39 ggttaatttc gagcttggcg taatcatgtc at 1020

40 <210> SEQ ID NO 2  
41 <211> LENGTH: 274  
42 <212> TYPE: PRT  
43 <213> ORGANISM: Arabidopsis thaliana  
44 <400> SEQUENCE: 2

PAGE: 2

# RAW SEQUENCE LISTING PATENT APPLICATION US/08/989,881A

DATE: 08/06/1999  
TIME: 15:22:49

Input Set: H989881A.RAW

```

45      Met Ala Asn Gln Thr Gln Ile Ser Asp Lys Tyr Ile Leu Gly Arg Glu
46      1              5              10              15
47      Leu Gly Arg Gly Glu Phe Gly Ile Thr Tyr Leu Cys Thr Asp Arg Glu
48              20              25              30
49      Thr Arg Glu Ala Leu Ala Cys Lys Ser Ile Ser Lys Arg Lys Leu Arg
50              35              40              45
51      Thr Ala Val Asp Val Glu Asp Val Arg Arg Glu Val Thr Ile Met Ser
52              50              55              60
53      Thr Leu Pro Glu His Pro Asn Val Val Lys Leu Lys Ala Thr Tyr Glu
54      65              70              75              80
55      Asp Asn Glu Thr Val His Leu Val Met Glu Leu Cys Glu Gly Gly Glu
56              85              90              95
57      Leu Phe Gly Arg Ile Val Ala Arg Gly His Tyr Thr Glu Arg Ala Ala
58              100             105             110
59      Ala Thr Val Ala Arg Thr Ile Ala Glu Val Val Arg Met Cys His Val
60              115             120             125
61      Asn Gly Val Met His Arg Asp Leu Lys Pro Glu Asn Phe Leu Phe Ala
62              130             135             140
63      Asn Lys Lys Glu Asn Ser Ala Leu Lys Ala Ile Asp Phe Gly Leu Ser
64      145             150             155             160
65      Val Leu Phe Lys Pro Gly Glu Arg Phe Thr Glu Ile Val Gly Ser Pro
66              165             170             175
67      Tyr Tyr Met Ala Pro Glu Val Leu Lys Arg Asn Tyr Gly Pro Glu Val
68              180             185             190
69      Asp Val Trp Ser Ala Gly Val Ile Leu Tyr Ile Leu Leu Cys Gly Val
70              195             200             205
71      Pro Pro Phe Trp Ala Glu Thr Glu Gln Gly Val Ala Leu Ala Ile Leu
72              210             215             220
73      Arg Gly Val Leu Asp Phe Lys Arg Asp Pro Trp Ser Gln Ile Ser Glu
74      225             230             235             240
75      Ser Ala Lys Ser Leu Val Lys Gln Met Leu Glu Pro Asp Ser Thr Lys
76              245             250             255
77      Arg Leu Thr Ala Gln Gln Val Leu Asp His Pro Trp Ile Gln Asn Ala
78              260             265             270
79      Lys Lys

```

80 &lt;210&gt; SEQ ID NO 3

81 &lt;211&gt; LENGTH: 29

82 &lt;212&gt; TYPE: DNA

83 &lt;213&gt; ORGANISM: Arabidopsis thaliana

84 &lt;400&gt; SEQUENCE: 3

85 gaagatctat gggtaatact tgtgttgga

29

86 &lt;210&gt; SEQ ID NO 4

87 &lt;211&gt; LENGTH: 28

88 &lt;212&gt; TYPE: DNA

89 &lt;213&gt; ORGANISM: Arabidopsis thaliana

90 &lt;400&gt; SEQUENCE: 4

91 gtcaaggcct gtcgacttga acccatgg

28

92 &lt;210&gt; SEQ ID NO 5

93 &lt;211&gt; LENGTH: 33

94 &lt;212&gt; TYPE: DNA

PAGE: 3

RAW SEQUENCE LISTING  
PATENT APPLICATION US/08/989,881ADATE: 08/06/1999  
TIME: 15:22:49

Input Set: H989881A.RAW

95	<213> ORGANISM: Arabidopsis thaliana	
96	<400> SEQUENCE: 5	
97	gcggatccat ggctaataca actcagatca gcg	33
98	<210> SEQ ID NO 6	
99	<211> LENGTH: 29	
100	<212> TYPE: DNA	
101	<213> ORGANISM: Arabidopsis thaliana	
102	<400> SEQUENCE: 6	
103	gtcaaggcct catcagtgaag aacatgttc	29
104	<210> SEQ ID NO 7	
105	<211> LENGTH: 30	
106	<212> TYPE: DNA	
107	<213> ORGANISM: Arabidopsis thaliana	
108	<400> SEQUENCE: 7	
109	gcggatccat ggagacgaag ccaaacccta	30
110	<210> SEQ ID NO 8	
111	<211> LENGTH: 30	
112	<212> TYPE: DNA	
113	<213> ORGANISM: Arabidopsis thaliana	
114	<400> SEQUENCE: 8	
115	gtcaaggcct tgcttggtca tcgacaatcc	30
116	<210> SEQ ID NO 9	
117	<211> LENGTH: 30	
118	<212> TYPE: DNA	
119	<213> ORGANISM: Arabidopsis thaliana	
120	<400> SEQUENCE: 9	
121	catgccatgg ctccggcgac taattcaccg	30
122	<210> SEQ ID NO 10	
123	<211> LENGTH: 32	
124	<212> TYPE: DNA	
125	<213> ORGANISM: Arabidopsis thaliana	
126	<400> SEQUENCE: 10	
127	gtcaaggcct attcttcaag aaccatttat cg	32
128	<210> SEQ ID NO 11	
129	<211> LENGTH: 30	
130	<212> TYPE: DNA	
131	<213> ORGANISM: Arabidopsis thaliana	
132	<400> SEQUENCE: 11	
133	gcggatccat ggctcgagct ccggtgacca	30
134	<210> SEQ ID NO 12	
135	<211> LENGTH: 31	
136	<212> TYPE: DNA	
137	<213> ORGANISM: Arabidopsis thaliana	
138	<400> SEQUENCE: 12	
139	gtcaaggcct attcttcaag aaccaactat g	31
140	<210> SEQ ID NO 13	
141	<211> LENGTH: 33	
142	<212> TYPE: DNA	
143	<213> ORGANISM: Arabidopsis thaliana	
144	<400> SEQUENCE: 13	

PAGE: 4

RAW SEQUENCE LISTING  
PATENT APPLICATION US/08/989,881ADATE: 08/06/1999  
TIME: 15:22:49

Input Set: H989881A.RAW

145	gcggatccat ggctaagtca gagctggtga aag	33
146	<210> SEQ ID NO 14	
147	<211> LENGTH: 31	
148	<212> TYPE: DNA	
149	<213> ORGANISM: Arabidopsis thaliana	
150	<400> SEQUENCE: 14	
151	gtcaaggcct attctttagg aaccatgaat g	31
152	<210> SEQ ID NO 15	
153	<211> LENGTH: 33	
154	<212> TYPE: DNA	
155	<213> ORGANISM: Arabidopsis thaliana	
156	<400> SEQUENCE: 15	
157	gcggatccat ggctaagtat gacgttggtca agg	33
158	<210> SEQ ID NO 16	
159	<211> LENGTH: 28	
160	<212> TYPE: DNA	
161	<213> ORGANISM: Arabidopsis thaliana	
162	<400> SEQUENCE: 16	
163	gtcaaggcct attcttcaag taccacgg	28
164	<210> SEQ ID NO 17	
165	<211> LENGTH: 20	
166	<212> TYPE: DNA	
167	<213> ORGANISM: Hordeum vulgare	
168	<400> SEQUENCE: 17	
169	tccaccgaga tgccgacgca	20
170	<210> SEQ ID NO 18	
171	<211> LENGTH: 26	
172	<212> TYPE: DNA	
173	<213> ORGANISM: Hordeum vulgare	
174	<400> SEQUENCE: 18	
175	gttggaggcc atggtcgtct cacgat	26

PAGE: 5

VERIFICATION SUMMARY  
PATENT APPLICATION US/08/989,881A

DATE: 08/06/1999  
TIME: 15:22:49

Input Set: H989881A.RAW

Line ? Error/Warning

Original Text

19 W "N" or "Xaa" used: Feature required

gttgtaaaac gacggncagt gaattgtaat acgactcn

38 W "N" or "Xaa" used: Feature required

ttatcgatac cgtcgacctc gagggggggc ccggtacc